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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Application No. : 10/735,601
Confirmation No. : 2496
Applicant: : Smith et al.
Filed: : December 12, 2003
Group Art Unit : 1632
Examiner: : Not assigned
For : Multi-antigenic Alphavirus Replicon Particles and Methods
Docket No. : 95-02
Customer No. : 23713

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

MAIL STOP AMENDMENT
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Further to the Information Disclosure Statement filed October 12, 2004, the Examiner is respectfully requested to consider the additional references, copies enclosed, which may qualify as prior art. For the Examiner's Convenience, the references are listed on the attached Patent and Trademark Office Form PTO-1449. Pursuant to the Waiver of the Copy Requirement in 37 C.F.R. 1.98 for Cited Pending U.S. Patent Applications signed on September 21, 2004 and published on www.uspto.gov on September 24, 2004, copies of pending U.S. applications that are available in the Image File Wrapper system are not submitted, but will be provided on request.

This information is cited in a spirit of forthrightness and cooperation to enable the applicants to obtain that measure of protection for the invention to which there is entitlement. However, no representation is made that the listed art actually qualifies as prior art under the patent statute and the mere use of PTO-1449 is not an admission that all listed references are prior art. No representation is made that applicants know of the best art.

It is believed this submission does not require the payment of a fee as it is being submitted prior to the issuance of an Office Action on the merits of the application. If this is incorrect, please deduct the appropriate fee from deposit account no. 07-1969.

It is believed that this submission does not require the payment of any fees. If this is incorrect, however, please deduct the appropriate fee from deposit account 07-1969.

Respectfully submitted,



Donna M. Ferber
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Attorney Docket No. 95-02
lem:August 26, 2005

Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Application Number	10/735,601
Filing Date	12/12/2003
First Named Inventor	Smith et al.
Art Unit	1635
Examiner Name	Brian A. Whitemann
Attorney Docket Number	95-02

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U.S. PATENT DOCUMENTS

Examiner Initial*	Cite No. ¹	Document Number (US-)	Publication Date (MM-DD-YYYY)	Name	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear (or entire document unless noted otherwise)
	1	6,844,188	01/18/2005	MacDonald et al.	
	2	6,783,939	08/31/2004	Olmsted et al.	
	3	6,583,121	06/24/2003	Johnston et al.	
	4	6,451,592	09/17/2002	Dubensky, Jr. et al.	
	5	6,426,196	07/30/2002	Dubensky, Jr. et al.	
	6	6,391,632	05/21/2002	Dubensky, Jr. et al.	
	7	6,376,236	04/23/2002	Dubensky, Jr. et al.	
	8	6,342,372	01/29/2002	Dubensky, Jr. et al.	
	9	6,329,201	12/11/2002	Polo et al.	
	10	6,261,570	07/17/2002	Parker et al.	
	11	6,224,879	05/01/2002	Sjoberg et al.	
	12	6,156,558	12/05/2000	Johnston et al.	
	13	6,146,874	11/14/2000	Zolotukhin et al.	
	14	6,015,694	01/18/2000	Dubensky, Jr. et al.	
	15	6,015,686	01/18/2000	Dubensky, Jr. et al.	
	16	6,008,035	12/28/1999	Johnston et al.	
	17	5,843,723	12/01/1998	Dubensky, Jr. et al.	
	18	5,814,482	09/29/1998	Dubensky, Jr. et al.	
	19	5,789,245	08/04/1998	Dubensky, Jr. et al.	
	20	5,766,602	06/16/1998	Xiong et al.	
	21	5,739,026	04/14/1998	Garoff et al.	
	22	5,217,879	06/08/1993	Huang et al.	
	23	5,091,309	02/25/1992	Schlesinger et al.	
	24	4,708,871	11/24/1987	Geysen	
	25	2005/0123555	06/09/2005	Olmsted et al.	
	26	2005/0054107	03/10/2005	Chulay et al.	
	27	2004/0235133	11/25/2004	Frolov et al.	
	28	2004/0029278	02/12/2004	Dubensky et al.	
	29	2003/0232035	12/18/2003	Dubensky et al.	
	30	2003/0148262	08/07/2003	Polo et al.	
	31	2003/0119182	06/26/2003	Smith et al.	
	32	2002/0141975	10/03/2002	Olmsted et al.	

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FOREIGN PATENT DOCUMENTS

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	33	WO 04/085660	10/07/2004	Smith et al.		
	34	WO 03/023026 A	03/20/2003	Smith et al.		
	35	WO 02/20721	03/14/2002	Johnston et al.		
	36	WO 00/61772	10/19/2000	Polo et al.		
	37	WO 00/39318	07/06/2000	Polo et al.		
	38	WO 96/37616	11/28/1996	Johnston et al.		
	39	WO 96/37220	11/28/1996	Johnston et al.		
	40	WO 96/17072	06/06/1996	Dubensky, Jr. et al.		
	41	WO 95/31565	11/23/1995	Sjoberg et al.		
	42	WO 95/27044	10/12/1995	Liljestrom et al.		
	43	WO 95/07994	03/23/1995	Dubensky, Jr. et al.		
	44	WO 92/10578	06/25/1992	Garoff et al.		

NON-PATENT LITERATURE DOCUMENTS

Examiner Initial*	Cite No. ¹	REFERENCE Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
	45	Barouch et al. (2000) "Augmentation of Immune Responses to HIV-1 and Simian Immunodeficiency Virus DNA Vaccines by IL-2/Ig Plasmid Administration in Rhesus Monkeys," <i>Proc. Natl. Acad. Sci. USA</i> 97(8):4192-4197	
	46	Berglund et al. (1993) "Semliki Forest Virus Expression System: Production of Conditionally Infectious Recombinant Particles," <i>Bio/Technology</i> 11:916-920	
	47	Betts et al. (1997) "Cross-Clade Human Immunodeficiency Virus (HIV)-Specific Cytotoxic T-Lymphocyte Responses in HIV-Infected Zambians," <i>J. Virol.</i> 71(11):8908-8911	
	48	Bredenbeek et al. (1993) "Sindbis Virus Expression Vectors: Packaging of RNA Replicons by Using Defective Helper RNAs," <i>J. Virol.</i> 67:6439-6446	
	49	Caley et al. (1997) "Humoral, Mucosal, and Cellular Immunity in Response to a Human Immunodeficiency Virus Type 1 Immunogen Expressed by a Venezuelan Equine Encephalitis Virus Vaccine Vector," <i>J. Virol.</i> 71(4):3031-3038	

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	50	Caley et al. (1999) "Venezuelan Equine Encephalitis Virus Vectors Expressing HIV-1 Proteins: Vector Design Strategies for Improved Vaccine Efficacy," <i>Vaccine</i> 17:3124-3135	
	51	Chappell et al. (Feb. 2000) "A 9-nt Segment of a Cellular mRNA can Function as an Internal Ribosome Site (IRES) and When Present in Linked Vaccine Efficacy," <i>Proc. Natl. Acad. Sci. USA</i> 97(4):1536-1541	
	52	Corsini et al. (1996) "Efficiency of Transduction by Recombinant Sindbis Replicon Virus Varies Among Cell Lines, Including Mosquito Cells and Rat Sensory Neurons," <i>BioTechniques</i> 21(3):492-497	
	53	Cutler et al. (1986) "Mutants of the Membrane-binding Region of Semliki Forest Virus E2 Protein.I. Cell Surface Transport and Fusogenic Activity," <i>J. Cell Biol.</i> 102:889-901	
	54	Davis et al. (1993) "A Genetically Engineered Live Virus Vaccine for Venezuelan Equine Encephalitis," <i>J. Cell Biochem. Supp</i> O No.17 part D, Abstract N404	
	55	Davis et al. (1996) "A Viral Vaccine Vector that Expresses Foreign Genes in Lymph Nodes and Protects Against Mucosal Challenge," <i>J. Virol.</i> 70:3781-3787	
	56	Davis et al. (1995) "Attenuated Mutants of Venezuelan Equine Encephalitis Virus Containing Lethal Mutations in the PE2 Cleavage Signal Combined with a Second-Site Suppressor Mutation in E1," <i>Virol.</i> 212:102-110	
	57	Davis et al. (1991) "Attenuating Mutations in the E2 Glycoprotein Gene of Venezuelan Equine Encephalitis Virus: Construction of Single and Multiple Mutants in a Full-Length cDNA Clone," <i>Virol.</i> 183:20-31	
	58	Davis et al. (1996) "Immunization Against Influenza with Attenuated Venezuelan Equine Encephalitis Virus Vectors," In: <u>Options for the Control of Influenza III</u> , L.E.Brown and A.W.Hampson, eds. Elsevier, Amsterdam pp.803-809	
	59	Davis et al. (1990) "In Vitro Synthesis of Infectious Venezuelan Equine Encephalitis Virus RNS from a cDNA Clone: Analysis of a Viable Deletion Mutant and Mutations Affecting Virulence," <i>Vaccines</i> 90:109-113	
	60	Davis et al. (1989) "In Vitro Synthesis of Infectious Venezuelan Equine Encephalitis Virus RNA from a cDNA Clone: Analysis of a Viable Deletion Mutant," <i>Virol.</i> 171:189-204	
	61	Davis et al. (2001) "Vaccination of Macaques Against Pathogenic Simian Immunodeficiency Virus with Venezuelan Equine Encephalitis Virus Replicon Particles," <i>J. Virol.</i> 74(1):371-378	
	62	Davis et al. (1994) "A Molecular Genetic Approach to the Study of Venezuelan Equine Encephalitis Virus Pathogenesis," <i>Arch. Virol.</i> 9:99-109	
	63	Dubensky et al. (1996) "Sindbis Virus DNA-Based Expression Vectors: Utility for in Vitro and in Vivo Gene Transfer," <i>J. Virol.</i> 70:508-519	
	64	Dubuisson et al. (1993) "Sindbis Virus Attachment: Isolation and Characterization of Mutants With Impaired Binding to Vertebrate Cells," <i>J. Virol.</i> 67:3363-3374	
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	65	Favre et al. (1993) "Semliki Forest Virus Capsid Protein Expressed by a Baculovirus Recombinant," <i>Arch. Virol.</i> 132:307-319	
	66	Feyzi et al (1997) "Structural Requirement of Heparan Sulfate for Interaction with Herpes Simplex Virus Type 1 Virions and Isolated Glycoprotein C," <i>J. Biol. Chem.</i> 272(40):24850-24857	
	67	Garoff et al. (1983) "Expression of Semliki Forest Virus Proteins from Cloned Complementary DNA. II. The Membrane-Spanning Glycoprotein E2 is Transported to the Cell Surface Without its Normal Cytoplasmic Domain," <i>J. Cell Biol.</i> 97:652-658	
	68	Geigenmuller-Gnirke et al. (1991) "Complementation Between Sindbis Viral RNAs Produce Infectious Particles with a Bipartite Genome," <i>Proc. Natl. Acad. Sci. USA.</i> 88:3253-3257	
	69	Gingras et al. (1996) "Activation of the Translational Suppressor 4E-BP1 Following Infection with Encephalomyocarditis Virus and Poliovirus," <i>Proc. Natl. Acad. Sci. USA</i> 93:5578-5583	
	70	Gradi et al. (1998) "Proteolysis of Human Eukaryotic Translation Initiation Factor eIF4GII, but Not eIF4GI, Coincides with the Shutoff of Host Protein Synthesis after Poliovirus Infection," <i>Proc. Natl. Acad. Sci. USA</i> 95:11089-11094	
	71	Grieder et al. (1995) "Specific Restrictions in the Progression of Venezuelan Equine Encephalitis Virus-Induced Disease Resulting from Single Amino Acid Changes in Glycoproteins," <i>Virol.</i> 206:994-1006	
	72	Heidner et al. (1994) "Lethality of PE2 Incorporation into Sindbis Virus can be Suppressed by Second-Site Mutations in E3 and E2," <i>J. Virol.</i> 68:2683-2692	
	73	Heise et al. (Jan. 2003) "An Attenuation Mutation in nsP1 of the Sindbis-Group Virus S.A.AR86 Accelerates Nonstructural Protein Processing and Up Regulates Viral 26S RNA Synthesis," <i>J. Virol.</i> 77(2):1149-1156	
	74	Herweijer et al. (1997) "Self-Amplifying Vectors for Gene Delivery," <i>Adv. Drug Rev.</i> 27:5-16	
	75	Hevey et al. (Nov. 2001) "Marburg Virus Vaccines: Comparing Classical and New Approaches," <i>Vaccine</i> 20:586-593	
	76	Hirsch et al. (1996) "Patterns of Viral Replication Correlate with Outcome in Simian Immunodeficiency Virus (SIV)-Infected Macaques: Effect of Prior Immunization with a Trivalent SIV Vaccine in Modified Vaccinia Virus Ankara," <i>J. Virol.</i> 70(6):3741-3752	
	77	Hodgson et al. (1993) "Expression of Venezuelan Equine Encephalitis Viral Proteins by Recombinant Baculoviruses," <i>Am. J. Trop. Med. Hygiene</i> 49:195-196	
	78	Holcik et al. (2000) "Functional Characterization of the X-Linked Inhibitor of Apoptosis (XIAP) Internal Ribosome Entry Site Element: Role of La Autoantigen in XIAP Translation," <i>Mol. Cell. Biol.</i> 20(13):4648-4657	
	79	Holcik et al. (1999) "A New Internal-Ribosome-Entry-Site Motif Potentiates XIAP-Mediated Cytoprotection," <i>Nature Cell Biol.</i> 1:190-192	
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	80	Holcik et al. (Jan. 2003) "The Internal Ribosome Entry Site-Mediated Translation of Antiapoptotic Protein XIAP is Modulated by the Heterogeneous Nuclear Ribonucleoproteins C1 and C2," <i>Mol. Cell. Biol.</i> 23(1):280-288		
	81	International Search Report of International Application Serial No. PCT/US02/28610 filed September 6, 2002		
	82	International Search Report Corresponding to PCT/US 2004/008458 Filed October 25, 2004		
	83	Jalanko (1985) "Expression of Semliki Forest Virus Capsid Protein from SV40 Recombinant Virus," <i>FEBS Lett.</i> 186:59-64		
	84	Jang et al. (1990) "Cap-Independent Translation of Encephalomyocarditis Virus RNA: Structural Elements of the Internal Ribosomal Entry Site and Involvement of a Cellular 57kD RNA-Binding Protein," <i>Genes and Development</i> 4:1560-1572		
	85	Joachims et al. (1999) "Cleavage of Poly(A)-Binding Protein by Enterovirus Proteases Concurrent with Inhibition of Translation <i>In Vitro</i> ," <i>J. Virol.</i> 73(1):718-727		
	86	Johnston et al. (1996) "Alphaviruses," In: <i>Fields Virology</i> , 3 rd ed., Lippincott-Raven Publishers, Philadelphia, Chapt 28:843-898		
	87	Johnston et al. (1988) "Selection for Accelerated Penetration in Cell Culture Coselects for Attenuated Mutants of Venezuelan Equine Encephalitis Virus," <i>Virol.</i> 162:437-443		
	88	Kinney et al. (1993) "Attenuation of Venezuelan Equine Encephalitis Virus Strain TC-83 Is Encoded by the 5'-Noncoding Region and the E2 Envelope Glycoprotein," <i>J. Virol.</i> 67:1269-1277		
	89	Knight (1999) "Secretion from Bovine Chromaffin Cells Acutely Expressing Exogenous Proteins using a Recombinant Semliki Forest Virus Containing an EGFP Reporter," <i>Mol. Cell. Neuro.</i> 14(6):486-505		
	90	Kohl et al. (1999) "Transient Gene Expression in Mammalian and Mosquito Cells Using a Recombinant Semliki Forest Virus Expressing T7 RNA Polymerase," <i>Appl. Microbiol. Biotechnol.</i> 53(1):51-56		
	91	Kondor-Koch et al. (1983) "Expression of Semliki Forest Virus Proteins from Cloned Complementary DNA. I. The Fusion Activity of the Spike Glycoprotein," <i>J. Cell. Biol.</i> 97(3):644-651		
	92	Lee et al. (1997) "Efficient Long-Term Coexpression of a Hammerhead Ribozyme Targeted to the U5 Region of HIV-1 LTR by Linkage to the Multidrug-Resistance Gene," <i>Antisense & Nucleic Acid Drug Development</i> 7:511-522		
	93	Lemm et al. (1994) "Polypeptide Requirements for Assembly of Functional Sindbis Virus Replication Complexes: A Model for the Temporal Regulation of Minus- and Plus-Strand RNA Synthesis," <i>EMBO J.</i> 13:2925-2934		
	94	Leone et al. (1985) "In Vitro Synthesis of the Gene Coding for the Glycoprotein E1 of Sindbis Virus," <i>Microbiologica</i> 8(2):123-130		
	95	Li et al. (1996) "Production of Infectious Recombinant Moloney Murine Leukemia		
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		Virus Particles in BHK Cells Using Semliki Forest Virus-Derived RNA Expression Vectors," <i>Proc. Natl. Acad. Sci. USA</i> 93:11658-11663	
	96	Liljestrom et al. (1991) "A New Generation of Animal Cell Expression Vectors Based on the Semliki Forest Virus Replicon." <i>BioTechnology</i> 9:1356-1361	
	97	Liljestrom (1994) "Alphavirus Expression Systems," <i>Curr. Opin. Biotechnol.</i> 5:495-500	
	98	Lobigs et al. (1990) "Fusion Function of the Semliki Forest Virus Spike is Activated by Proteolytic Cleavage of the Envelope Glycoprotein Precursor p62," <i>J. Virol.</i> 64:1233-1240	
	99	Lundstrom et al. (1985) "Secretion of Semliki Forest Virus Membrane Glycoprotein E1 from <i>Bacillus subtilis</i> ," <i>Virus Res.</i> 2:69-83	
	100	Martinez-Salas et al. (May 2001) "Functional Interactions in Internal Translation Initiation Directed by Viral and Cellular IRES Elements," <i>J. Gen. Virol.</i> 82:973-984	
	101	McKnight et al. (1996) "Deduced Consensus Sequence of Sindbis Virus Strain AR339: Mutations Contained in Laboratory Strains which Affect Cell Culture and <i>In Vivo</i> Phenotypes," <i>J. Virol.</i> 70(3):1981-1989	
	102	Melancon et al. (1987) "Processing of the Semliki Forest Virus Structural Polyprotein: Role of Capsid Protease," <i>J. Virol.</i> 61:1301-1309	
	103	Melancon et al. (1986) "Reinitiation of Translocation in the Semliki Forest Virus Structural Polyprotein: Identification of the Signal for the E1 Glycoprotein," <i>EMBO J.</i> 5:1551-1560	
	104	Morgenstern et al. (1990) "Advanced Mammalian Gene Transfer: High Titre Retroviral Vectors with Multiple Drug Selection Markers and a Complementary Helper-Free Packaging Cell Line," <i>Nuc. Acid. Res.</i> 18:3587-3596	
	105	Oker-Blom et al. (1989) "Expression of Sindbis Virus 26S cDNA in <i>Spodoptera frugiperda</i> (Sf9) Cells, Using a Baculovirus Expression Vector," <i>J. Virol.</i> 63:1256-1264	
	106	Orkin et al. (1995) "Report and Recommendations of the Panel to Assess the NIH Investment in Research on Gene Therapy"	
	107	Paredes et al. (1993) "Three-Dimensional Structure of a Membrane-Containing Virus," <i>Proc. Natl. Acad. Sci. USA</i> 90:9095-9099	
	108	Polo et al. (1990) "Attenuating Mutations in Glycoproteins E1 and E2 of Sindbis Virus Produces a Highly Attenuated Strain When Combined <i>In Vitro</i> ," <i>J. Virol.</i> 64:4438-4444	
	109	Presley et al. (1991) "Proteolytic Processing of the Sindbis Virus Membrane Protein Precursor PE2 is Nonessential for Growth in Vertebrate Cells but is required for Efficient Growth in Invertebrate Cells," <i>J. Virol.</i> 65:1905-1909	
	110	Pugachev et al. (2000) "Development of a Rubella Virus Vaccine Expression Vector: Use of a Picornavirus Internal Ribosome Entry Site Increases Stability of Expression," <i>J. Virol.</i> 74:10811-10815	
	111	Pushko et al. (Dec. 2001) "Individual and Bivalent Vaccines Based on Alphavirus Replicons Protect Guinea Pigs Against Infection with Lassa and Ebola Viruses," <i>J.</i>	
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		<i>Virol.</i> 75(23):11677-11685-	
	112	Pushko et al. (1997) "Replicon-Helper Systems from Attenuated Venezuelan Equine Encephalitis Virus: Expression of Heterologous Genes in Vitro and Immunization Against Heterologous Pathogens in Vivo," <i>Virol.</i> 239:389-401	
	113	Rayner et al. (Sept. 2002) "Alphavirus Vectors and Vaccination," <i>Rev. Med. Virol.</i> 12(5):279-296	
	114	Rice et al. (1985) "Expression of Sindbis Virus Structural Proteins via Recombinant Vaccinia Virus: Synthesis, Processing, and Incorporation into Mature Sindbis Virions," <i>J. Virol.</i> 56:227-239	
	115	Riedel (1985) "Different Membrane Anchors Allow the Semliki Forest Virus Spike Subunit E2 to Reach the Cell Surface," <i>J. Virol.</i> 54:224-228	
	116	Roberts et al. (1997) "Complementation of Defective Picornavirus Internal Ribosome Entry Site (IRES) Elements by the Coexpression of Fragments of the IRES," <i>Virol.</i> 227:53-62	
	117	Russell et al. (1989) "Sindbis Virus Mutations Which Coordinately Affect Glycoprotein Processing, Penetration, and Virulence in Mice," <i>J. Virol.</i> 63:1619-1629	
	118	Salminen et al. (1992) "Membrane Fusion Process of Semliki Forest Virus II: Cleavage-Dependant Reorganization of the Spike Protein Complex Controls Virus Entry," <i>J. Cell. Biol.</i> 116:349-357	
	119	Schlesinger et al. (1996) "Togaviridae: The Viruses and Their Replication," In: <u>Fields Virology</u> , 3 rd Edition, Lipincott-Raven Publishers, Philadelphia, pp.825-841	
	120	Schlesinger et al. (1994) "Recombination Between Sindbis Virus RNAs," <i>J. Virol.</i> 65:4017-4025	
	121	Schoepp et al. (1993) "Directed Mutagenesis of a Sindbis Virus Pathogenesis Site," <i>Virol.</i> 193:149-159	
	122	Shi et al. (May 2002) "Construction and Characterization of Subgenomic Replicons of New York Strain of West Nile Virus," <i>Virol.</i> 296(2):219-233	
	123	Simpson et al. (1996) "Complete Nucleotide Sequence and Full Length cDNA Clone of S.A.Ar86, a South African Alphavirus Related to Sindbis," <i>Virol.</i> 222:464-469	
	124	Sjoberg et al. (1994) "A Significantly Improved Semliki Forest Virus Expression System Based on Translation Enhancer Segments from the Viral Capsid Gene," <i>BioTechnol.</i> 12:1127-1131	
	125	Strauss et al. (1990) "Alphavirus Proteinases," <i>Sem. Virol.</i> 1:347-356	
	126	Strauss et al. (1994) "The Alphaviruses: Gene Expression, Replication, and Evolution," <i>Microbiological Rev.</i> 58:491-562	
	127	Suomalainen et al. (1992) "Spike Protein-Nucleocapsid Interactions Drive the Budding of Alphaviruses," <i>J. Virol.</i> 66(8):4737-4747	
	128	Sykes et al. (1999) "Genetic Live Vaccines Mimic the Antigenicity but Not	

Examiner Signature		Date Considered	
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¹Applicant's unique citation designation number (optional).

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Substitute for form 1449/PTO, based on PTO/SB/08A and 08B

**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

Application Number	10/735,601
Filing Date	12/12/2003
First Named Inventor	Smith et al.
Art Unit	1635
Examiner Name	Brian A. Whitemann
Attorney Docket Number	95-02

GWS 8/19/2005

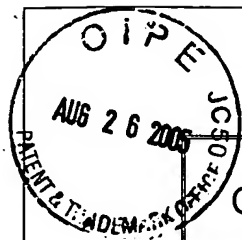
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		Pathogenicity of Live Viruses," <i>DNA Cell Biol.</i> 18(7):521-531	
	129	Thompson et al. (Oct. 2003) "Enterovirus 71 Contains a Type I IRES Element that Functions When Eukaryotic Initiation Factor eIF4G is Cleaved," <i>Viol.</i> 315:259-266	
	130	Ubol et al. (1994) "Neurovirulent Strains of Alphavirus Induce Apoptosis in bcl-2-Expressing Cells: Role of A Single Amino Acid Change in the E2 Glycoprotein," <i>Proc. Natl. Acad. Sci. USA</i> 91:5202-5206	
	131	Van der Velden et al. (1995) "Defective Point Mutants of the Encephalomyocarditis Virus Internal Ribosome Entry Site can be Complemented <i>in Trans</i> ," <i>Viol.</i> 214:82-90	
	132	Verma et al. (1997) "Gene Therapy – Promise and Prospects," <i>Nature</i> 389:239-242	
	133	Wang et al. (2000) "Core Protein-Coding Sequence, But Not Core Protein, Modulates the Efficiency of Cap-Independent Translation Directed by the Internal Ribosome Entry Site of Hepatitis C Virus," <i>J. Virol.</i> 74(23):11347-11358	
	134	Weiss et al. (1991) "Recombination Between Sindbis Virus RNAs," <i>J. Virol.</i> 65:4017-4025	
	135	Wen et al. (1986) "Expression of Genes Encoding Vesicular Stomatitis and Sindbis Virus Glycoproteins in Yeast Leads to Formation of Disulfide-Linked Oligomers," <i>Viol.</i> 153:150-154	
	136	Wen et al. (2001) "Tricistronic Viral Vectors Co-Expressing Interleukin-12 (IL-12) and CD80 (B7-1) for the Immunotherapy of Cancer: Preclinical Studies in Myeloma," <i>Cancer Gene Therapy</i> 8(5):361-370	
	137	Williamson et al. (Feb. 2003) "Characterization and Selection of HIV-1 Subtype C Isolates for Use in Vaccine Development," <i>AIDS Research and Human Retroviruses</i> 19(2):133-144	
	138	Wilson et al. (2000) "Naturally Occurring Dicistronic Cricket Paralysis Virus RNA is Regulated by Two Internal Ribosome Entry Sites," <i>Mol. Cell. Biol.</i> 20(14):4990-4999	
	139	Xiong et al. (1989) "Sindbis Virus: An Efficient, Broad Host Range Vector for Gene Expression in Animal Cells," <i>Science</i> 243:1188-1191	
	140	Yang et al. (1997) "Location of the Internal Ribosome Entry Site in the 5'Non-Coding Region of the Immunoglobulin Heavy-Chain Binding Protein (BiP) mRNA: Evidence for Specific RNA-Protein Interactions," <i>Nuc. Acids. Res.</i> 25(14):2800-2807	
	141	Zhao et al. (1992) "Role of Cell Surface Spikes in Alphavirus Budding," <i>J. Virol.</i> 66:7089-7095	

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Attorney Docket No.: 95-02

Application No. : 10/735,601
Applicant: : Smith et al.
Filed: : December 12, 2003
For: : Multi-antigenic Alphavirus Replicon Particles and Methods

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